

3. A multi-wavelength laser according to Claim 1, further comprising:

*Sub B-1*  
an output coupler at the output of the OGM configured to send part of the OGM output to the periodic band-pass filter, and part of the output of the OGM as the output of the multi-wavelength laser; and

an input coupler at the input of the OGM configured to couple both a pump signal from the pump laser source, and an output of the periodic band-pass filter into the OGM, the OGM having no other optical input signal.

4. A multi-wavelength laser according to Claim 1, wherein the periodic bandpass filter comprises a Mach-Zehnder interferometer.

5. A multi-wavelength source according to Claim 1, wherein at least two lasing sources are realized in different bands of said periodic band-pass filter.

6. A multi-wavelength source according to Claim 1, further comprising polarization control means in the feedback loop to enhance effective feedback of signals in periodic bands of the periodic band-pass filter.